RAISE YOUR EXPECTATIONS

Front linkage

MX R06
MX R09
MX R10
MX R16

User Manual

Read carefully before using

EN 361905 AK - 0825
Translation of the original manual

Dear user,

We thank you for placing your trust in us and hope that you will find your MX front linkage satisfactory in every way.

The demonstration of the equipment to be delivered should include:

By taking a few minutes to read this manual, you will be able to obtain the best results from your MX front linkage, extend its service life and ensure safe operation.

The front linkage user manual before you is an important document, so please retain it in order to be able to refer to it if required. Make it available to any other users and hand it over it to any new owner should your MX front linkage be sold on.

The illustrations and technical data shown in this document might not exactly match your front linkage; the operating requirements will nevertheless remain the same.

You can access the original manuals in English on the www.m-x.eu website:
Click on the English version of the site, then "Documentation/User manuals".

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CONTENTS

The user must read and understand this manual before first use.

Familiarise yourself with:

— ***Safety rules and operating requirements.***

— ***Hitching and unhitching the implement.***

— ***Full use of the controls.***

1. Safety rules

1.1 Safety rules

— PPE (Personal Protective Equipment) must be worn (please refer to the "PPE table").

— Seat belts must be worn by the driver and passengers.

— The tractor – front linkage combination must only be operated by trained and experienced personnel.

— When the tractor is fitted with a front linkage and a front loader, the user is required to unhitch the loader before using the MX front linkage (please refer to the loader user manual for the unhitching procedure).

— CAUTION : before any use of the front loader, check that the MX front linkage is locked hydraulically, and that the linkage arms are folded or retracted. (see "Setting the front linkage to transport position" section).

— Only operate the front linkage from the driver's seat or by using the MX factory-supplied external controls. Remain in charge of the controls until all movements stop.

— The controls for operating the front linkage must be of the "spring return" type with the exception of the floating position, which may be maintained using a notching system.

— Do not leave the driver's seat without inhibiting all control movements.

— You must ensure that nobody is in the operating area when the front linkage/implement are in use.

— The transport or lifting of persons by use of the front linkage is prohibited.

— Before moving with a front implement fitted, check and ensure that the tractor-front implement assembly is stable by fitting a counterweight at the rear of the tractor. This should ensure that 20% of the gross weight (tractor-front implement) remains on the rear axle of the tractor for optimum safety while travelling and working.

— The maximum front axle loading specified by the tractor manufacturer must not be exceeded.

— The front tyres' maximum safe load, as advised by the manufacturer, must not be exceeded.

— Check tyre pressures regularly.

— An implement hitched to the front linkage must be capable of being lifted through the full travel of the linkage. Any excess load impeding this travel is strictly forbidden.

— Before any operation, the user must ensure that the front linkage is in proper working order and can be used in complete safety.

— When travelling on the road with a front implement, the front linkage must always be in the raised position and it is essential to comply with road regulations (dimensions, signage on the implement, etc.)

— When driving on the road without a front implement, the front linkage must always be in the transport position (see chapter “Setting the front linkage to the transport position”)

— When the tractor is stopped, whether for a short or prolonged period, the engine must be switched off and the linkage lowered.

— The tractor must never be towed using an anchoring point on the front linkage.

— Check periodically to ensure that the safety pins and bolts are in place. Do not replace them with any other items such as nails, wire, etc.

— Any fault tracing (diagnostic) work and/or removal of parts may only be undertaken by a skilled technician, who will start by ensuring that the work can be carried out in complete safety for both him/herself and his/her surroundings.

1.2 SAFETY ALERTS Symbol

This symbol, the industry's "Safety Alert Symbol," is used throughout this manual and on labels to warn of the possibility of personal injury. When you see this symbol, carefully read the messages and be alert to the possibility of injury or death. It is essential you read these instructions and safety regulations before you attempt to assemble or use this unit.

Symbols	Term	Description
	**DANGER**	Indicates an imminently hazardous situation, which, if not avoided, will result in death or serious injury.
	**WARNING**	Indicates a potentially hazardous situation, which, if not avoided, could result in death or serious injury.
	**CAUTION**	Indicates a potentially hazardous situation, which, if not avoided, may result in minor or moderate injury.
	IMPORTANT	Indicates that equipment or property damage could result if instructions are not followed.
	NOTE	Gives helpful information.

1.3 PPE Table (Personal Protective Equipment)

Symbol	Meaning
	Hand protection equipment must be worn.
	Ear protection must be worn.
	Eye protection must be worn.
	Helmet must be worn.
	Body protection equipment must be worn.
	Foot protection must be worn.

1.4 Non-compliance with the safety and usage rules

— MX products are designed to be used at the maximum hydraulic pressure indicated by the manufacturer for the tractor's specifications. Use of excess pressure will result in additional strain and will therefore invalidate the MX equipment warranty.

— Never make any changes to the hose connections.

— Any instance of MX front linkage being fitted which ignores the recommendations in the MX price list in force on the date of purchase will void the MX warranty on the entire MX supply.

— Any modification to any part of the MX supply (rams, arms, linkage frame, etc.) or use of a component installed on the MX front linkage which has not originated from MX will void the MX warranty and its liability on the entire MX supply.

— Use only genuine MX spare parts. Do not modify your MX front linkage yourself or have it modified by anyone else, without applying for written authorisation from MX in advance. Failure to comply with these rules may make your MX front linkage hazardous. In the event of damage or injury, MX shall not be held responsible in any way.

— Warranty cover will cease immediately in the event of a failure to observe the standards and instructions for use and maintenance of the MX front linkage as stipulated in the user manual.

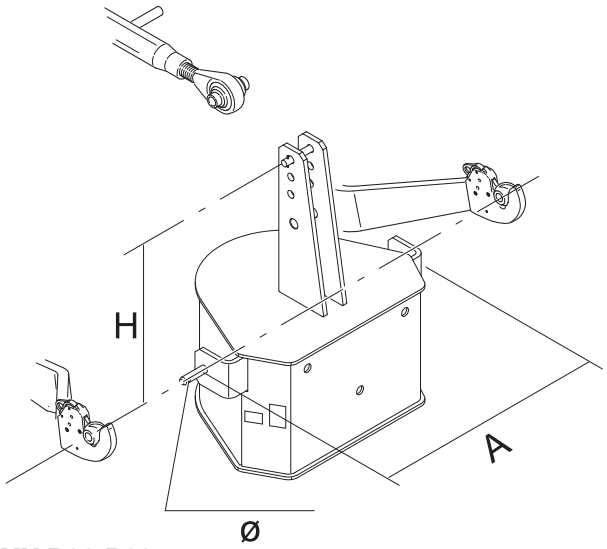
2. Operating requirements

2.1 Implement hitching.

The front linkages are designed to receive implements which comply with the hitch dimensions specified in ISO 8759-1.

MX R10-R16: category II
The distance between the implement's hitch points must be 825 mm (dimension A) with a linkage pin of 28 mm diameter (Ø D). The height of the implement brace must be 610 mm (dimension H).

MX R06-R09: category I
The distance between the implement's hitch points must be 683 mm (dimension A) with a linkage pin of 28 mm diameter (Ø D). The height of the implement brace must be 460 mm (dimension H).



MX R06-R09
A = 683 mm
H = 460 mm
ø = 22 (Cat.1)

MX R10-R16
A = 825 mm
H = 460 mm
ø = 28 mm (Cat.2)

⚠ ATTENTION: L'attelage de l'outil présentant une cote inférieure à la cote H engendre de fortes tensions dans la barre de 3ème point conduisant à sa détérioration.
L'attelage de l'outil présentant une cote supérieure à la cote H peut provoquer un endommagement de l'avant du tracteur (capot, calandre…) lors du levage.

2.2 Front overhang and use on the ground.

The implement must be hitched as close as possible to the attachment points on the front linkage. In fact, the longitudinal overhang generates considerable stresses on the front linkage (leverage effect). The more compact the implement fixing, the less strain there will be on the equipment. Using a compact implement also improves lifting performance.

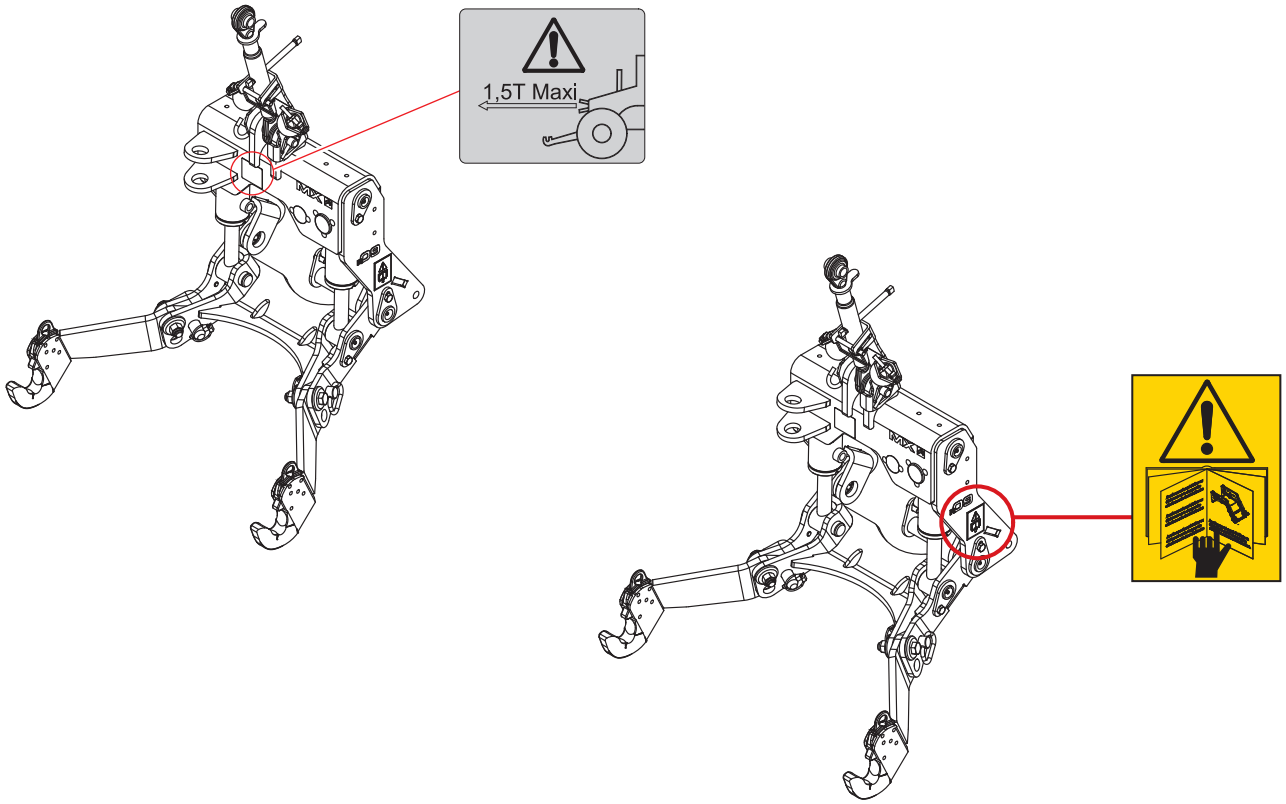
This category of linkage is not designed for working the ground. You are strongly advised not to fit soil engaging implements, so as to safeguard the structure of the machine.

⚠ CAUTION : The operating conditions for implement hitching and use on the ground must be strictly complied with. Any deviation from the conditions risks causing serious damage for which MX cannot be held liable.

3. Safety stickers

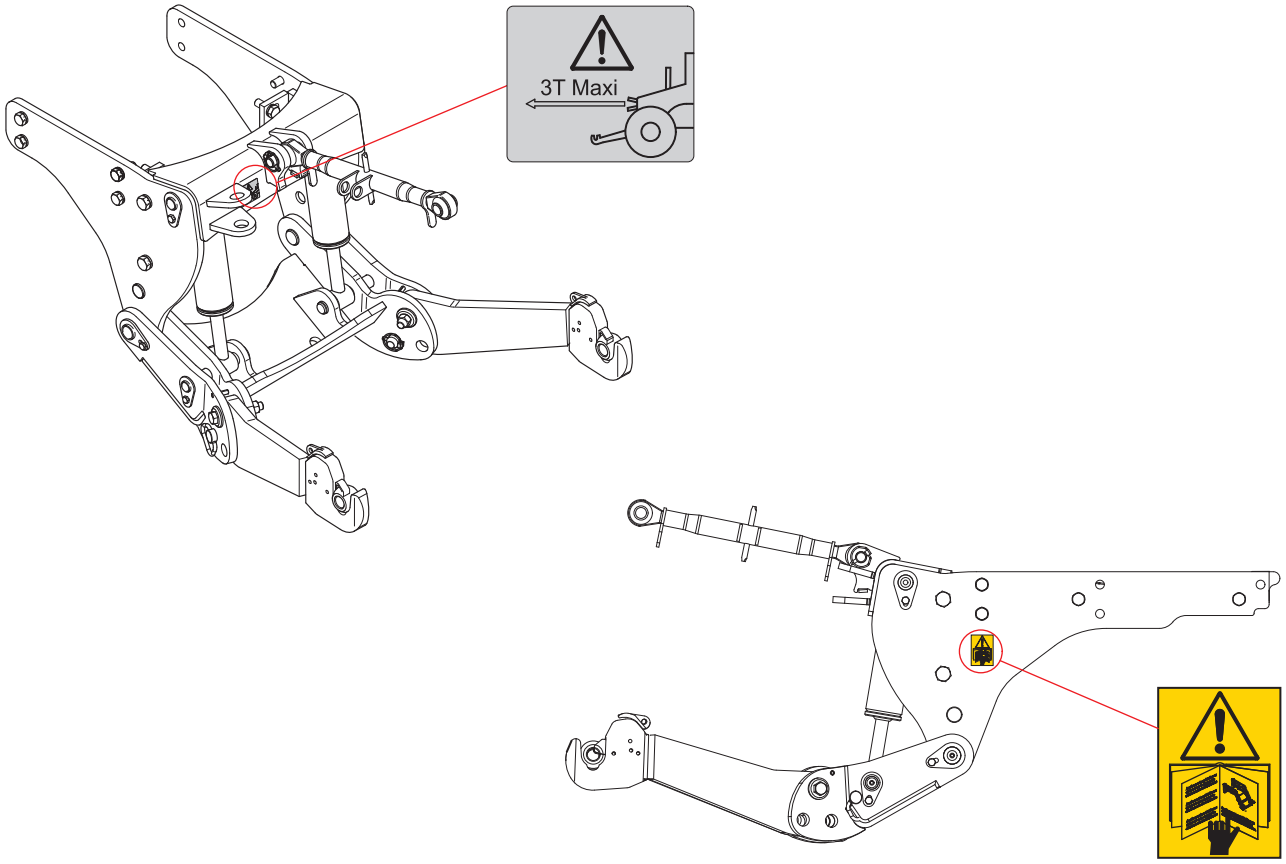
3.2.1 MX R06 - MX R09

A safety sticker is affixed to the front linkage. Ensure that it remains clean and legible; replace it if damaged.
If replacing a sticker, clean the surface with isopropyl alcohol and stick on the sticker using a special tool.



3.2.2 MX R10 - MX R16

A safety sticker is affixed to the front linkage. Ensure that it remains clean and legible; replace it if damaged.
If replacing a sticker, clean the surface with isopropyl alcohol and stick on the sticker using a special tool.

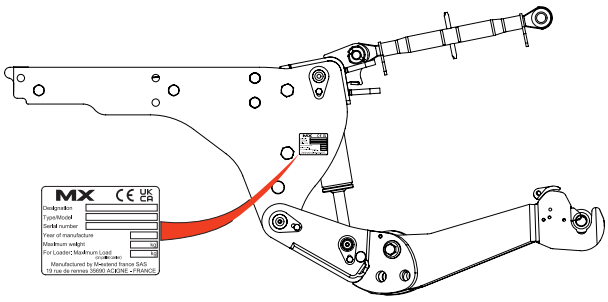


4. Identification plate

4.2.1 MX R10 - R16

The identification plate is located on the right-hand side of the front linkage frame.

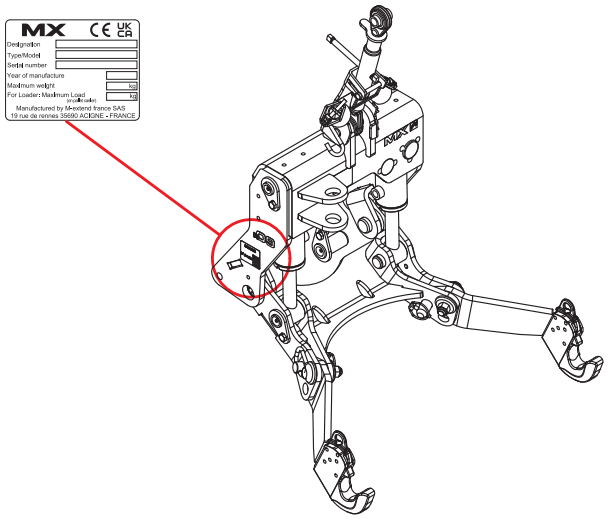
The serial number and front linkage model shown on this plate must be quoted in any request for information, parts or technical assistance.



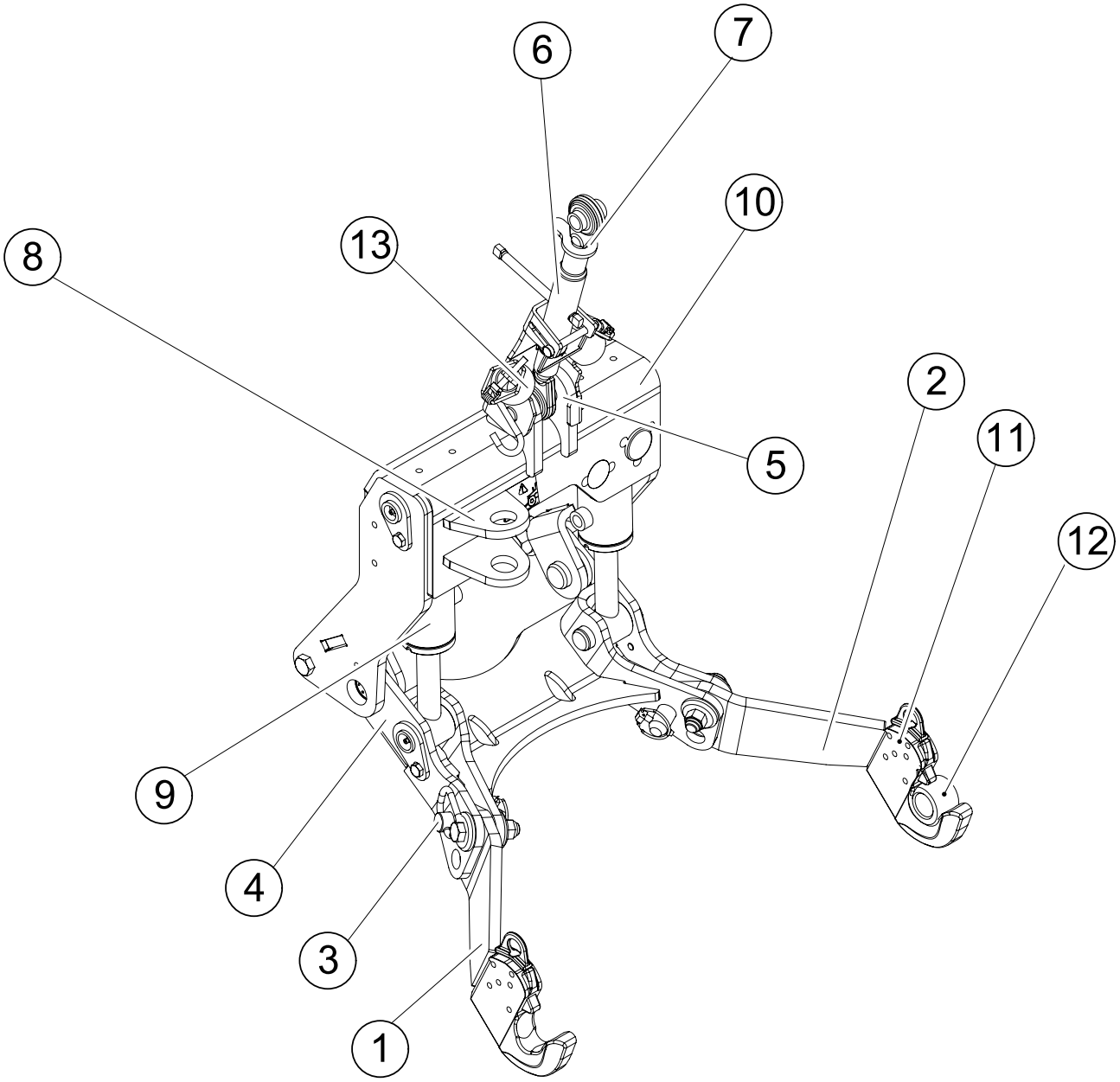
4.2.2 MX R06 - R09

The identification plate is located on the right-hand side of the front linkage frame.

The serial number and front linkage model shown on this plate must be quoted in any request for information, parts or technical assistance.

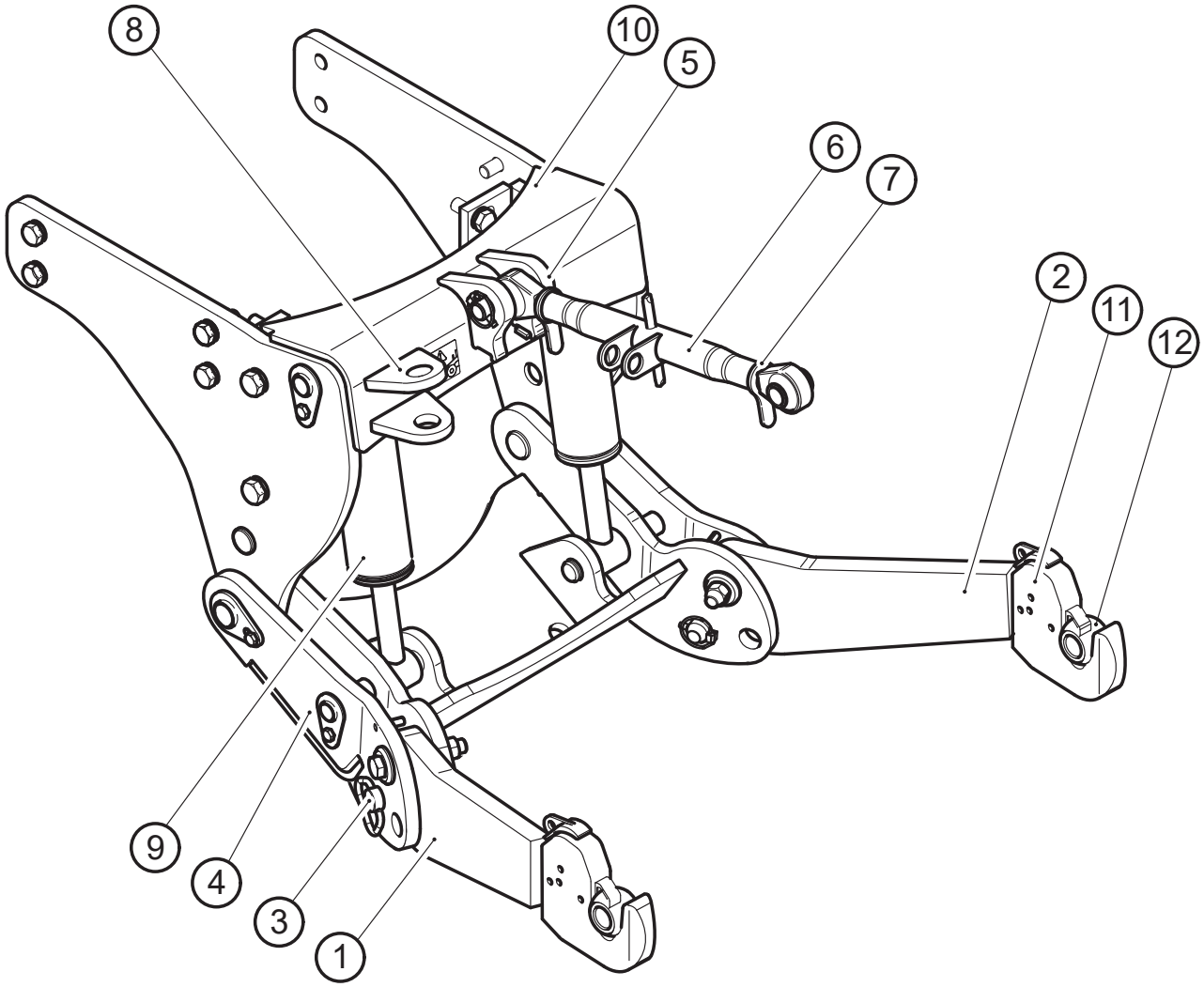


5. DESCRIPTION



MX R06 - R09

1: Right arm
2: Left arm
3: Arm pin
4: Linkage frame
5: Top-link yoke
6: Top-link bar
7: Lever locknut
8: Hitch yoke (use a 30 mm diameter pin)
9: Ram
10: Frame
11: Coupler
12: Ball end
13 : Ball end parking



MX R10 - R16

1: Right arm
2: Left arm
3: Arm pin
4: Linkage frame
5: Top-link yoke
6: Top-link bar
7: Lever locknut
8: Hitch yoke (use a 30 mm diameter pin)
9: Ram
10: Frame
11: Coupler
12: Ball end

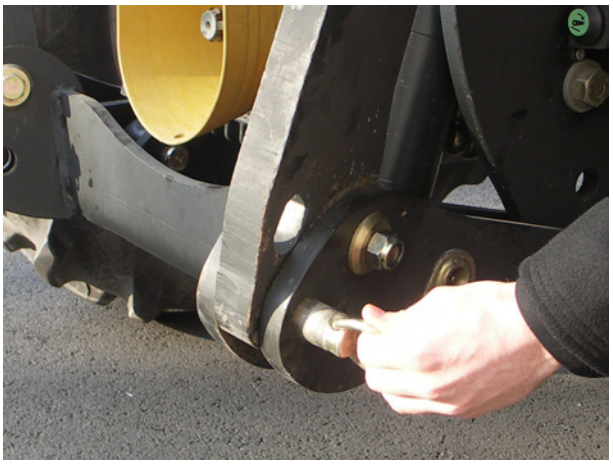
6. Setting front linkage to operating position

CAUTION : This operation must be carried out by the driver, who must leave the driving position and ensure all controls are disabled during work on the front linkage.

— Choose a level and solid surface.

NOTE : The tractor engine is to be turned off and the hand brake applied.

— Leave the driver's seat and remove the locking pin from the left-hand arm.



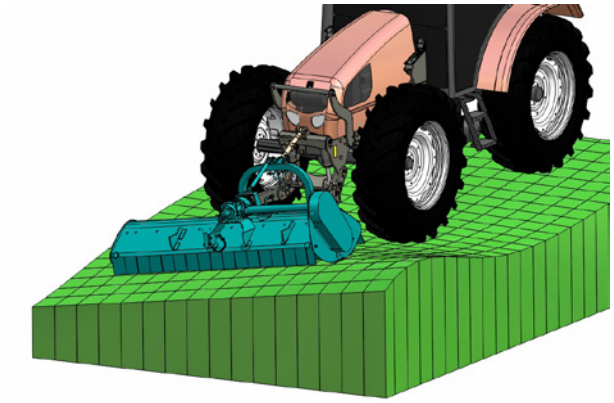
— Hold the left-hand arm and withdraw the pin.

— Pivot the arms forward until they are in the required position.

Position 1: Fixed position.

Position 2: Floating position.

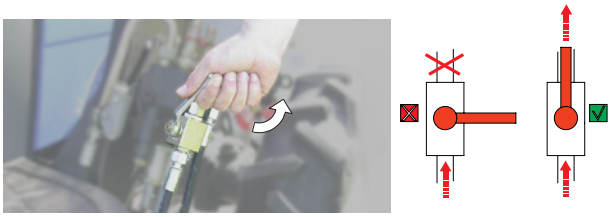
— Arm in floating position. The implement follows the contours of the ground.



— Refit the pin and secure it with the locking pin.

— Repeat operations for the right-hand arm.

— Open the stop valve.

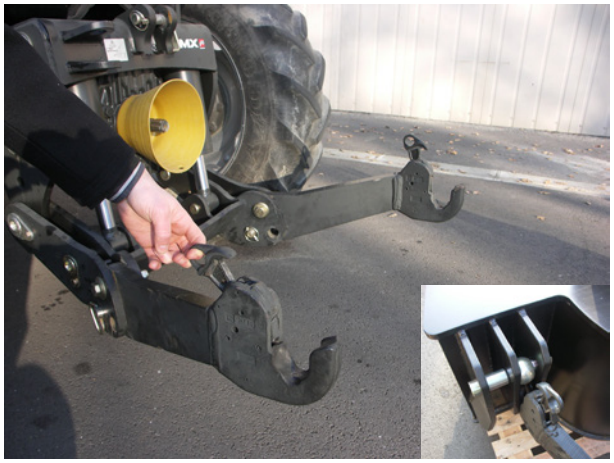


7. Hitching a front implement

CAUTION :This operation must be carried out by the driver who must leave the seat and ensure all manoevres are forbidden while he is working on the front linkage.

The linkage is in working position.

— Open the locking catches on the hitching hooks and hitch up the implement.

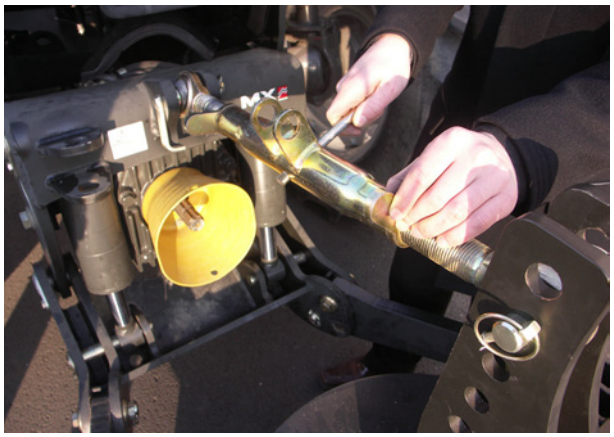


IMPORTANT : Check that the implement is fitted with suitable coupling balls secured with locking pins.

— Hitch the 3rd link bar to the bracket of the front implement.

— Set the length of the 3rd link bar to obtain the required geometry for the front implement.

— Use the lever locknut to lock the bar in position.



CAUTION : Mandatory pre-work checks:

- Carry out a lifting test, checking that the tractor and front implement interact correctly. Pay particular attention to the space between the 3rd link bar and the tractor bonnet.

- Check that all pins and clips are fitted and secured correctly.

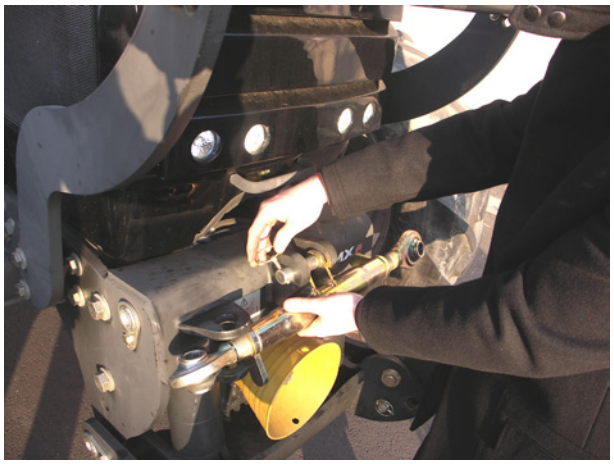
- Check the locking position of the hitching hooks (the catches must be retracted correctly).

8. Unhitching a front implement

CAUTION : This operation must be carried out by the driver, who must leave the driving position and ensure all controls are disabled during work on the front linkage.

— Place the front implement on level and solid ground. Apply the tractor hand brake.

— Free the 3rd link bar from the front implement bracket.



— Reposition the 3rd link bar onto the front linkage frame.

— For MX R06 - R09 front linkage, reposition the 3rd link bar in the transport position.

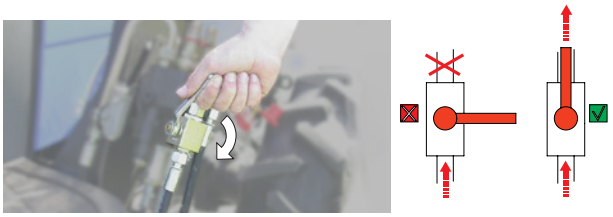
— Unlock the hitching hooks and lower the linkage arms to release the implement.

9. Setting front linkage to transport position

CAUTION : This operation must be carried out by the driver, who must leave the driving position and ensure all controls are disabled during work on the front linkage.

— Choose a level and solid surface. Raise the front linkage arms. Stop the tractor engine and apply the hand brake.

— Close the isolator valve.



— Remove the pin and locking pin, while holding the R.H. arm.

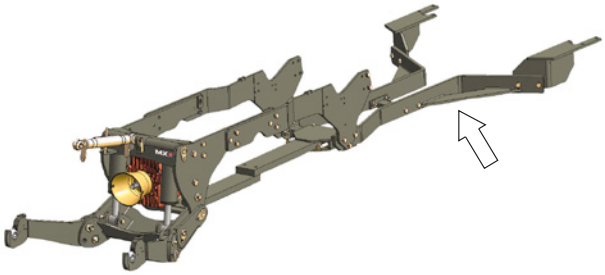
— Pivot the R.H. arm rearwards and refit the pin and locking pin.

— Repeat these steps for the L.H. arm.

10. Rear support

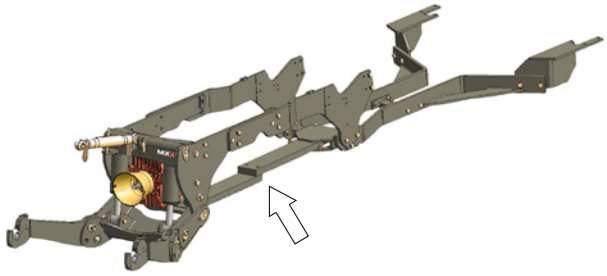
This structure is located under the tractor and it reinforces the tractor from the clutch bell housing to the rear trumpet housings.

NOTE : Rear support according to equipment.



11. Push bar

This attachment is located under the tractor, providing it with overall reinforcement from the front linkage to the rear trumpet housings.



IMPORTANT: This equipment is strongly recommended for any heavy pushing work (e.g.: plough, soil decompaction implement, dozer blade, etc.).

NOTE : Push bar according to equipment.

12. SHOCK ELIMINATOR System

The shock absorber function requires that:

— The minimum load for Shock Eliminator efficiency corresponds to 20% of the linkage max. capacity.

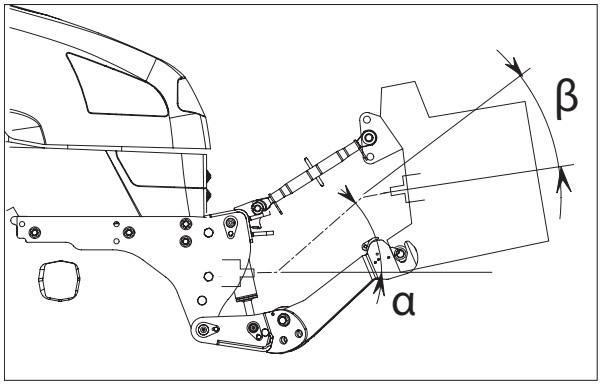
— The linkage is never at its maximum height. To attain the optimal shock absorbed, the linkage must be lowered slightly starting from the upper position.

NOTE: The greater the load, the smaller the shock absorber travel must be.

NOTE : SHOCK ELIMINATOR according to equipment.

13. Front power take-off

13.1 Safety rules recommendations in respect of power take-off



— Never start the engine with the power take-off engaged.

— Before hitching the implement, check that the direction of rotation of the implement is compatible with the front power take-off.

— Check that the speed and power of the implement are compatible with the power take-off. If they are not, the implement must not be hitched and connected.

— Check the length of the drive shaft between the implement and the front power take-off, and adjust if necessary.

— The drive shaft universal joint must be fitted with a suitable guard (compliant with the ISO 5673-1 standard).

— Never lift or lower the front linkage with the power take-off under load.

— Check angles a and b of the implement/power take-off universal joint. Adjust the 3rd link bar to make these angles approximately equal in terms of working position. The maximum values for angles a and b will vary according to the type of universal joint used (please refer to the universal joint manufacturer's user manual).

— Any maintenance on the implement must be carried out with the engine shut down, the implement completely at rest and hydraulically locked.

— Every time the power take-off is used, grease the sliding section of the shaft and the universal joint spiders beforehand.

— Never modify the electrical connections.

— Observe the maintenance instructions (please refer to the "Maintenance" section).

— The safety instructions in this manual are not to be construed as a replacement for safety regulations, insurance requirements or national and local legislation. Ensure your machine is fitted with the correct equipment as required by local laws and regulations.

NOTE : Front power take-off according to equipment.

⚠ CAUTION : This operation must be carried out by the driver, who must leave the driving position and ensure all controls are disabled during work on the front linkage.

13.2 Front power take-off (frontal)

— Hitch the implement (refer to the section “Hitching a front implement”).

— Connect the transmission shaft to the front power take-off.

— Restart the tractor and engage the front power take-off using the switch located in the cab.

— Increase engine speed to 2100 rpm in order to reach the rotation speed required by the implement (i.e. 1000 rpm).

— When finished using the power take-off, disengage it using the same switch in the cab.

Mandatory pre-work checks: Check that the tractor/ implement/transmission shaft are properly connected along the full lifting stroke before engaging the power take-off.

(1) Power take-off switch.

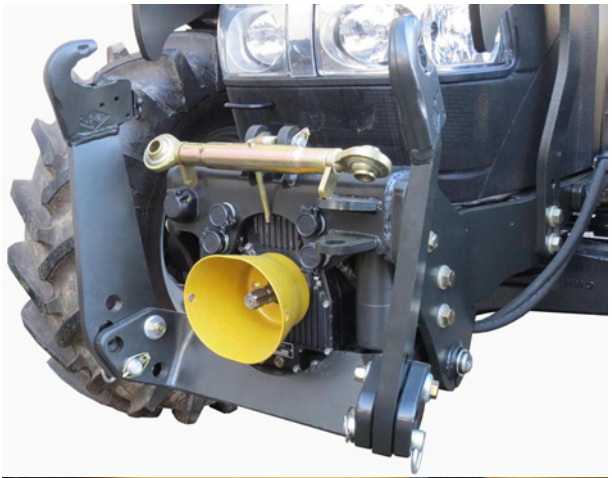
14. Auxiliary hydraulic line

Enables the supply to a hydraulic unit in front of the linkage.

— Connect the hydraulic hoses of the implement to the 3/8" female couplings. To facilitate connection, release the pressure from the hydraulic circuit.

— Operate the hydraulic line using the tractor or the MX control valves. (refer to the "Control" section).

NOTE : Auxiliary hydraulic line according to equipment.



15. 3-way selector

CAUTION :

- The levers must always be turned fully to either stop.

- Switching from Single-acting to Double-acting operation (and vice versa) must not be carried out before releasing the hydraulic pressure.

This selector, which is located behind the cab, enables the front linkage operating mode to be selected to suit your application with a single movement.

There are 3 operating modes:

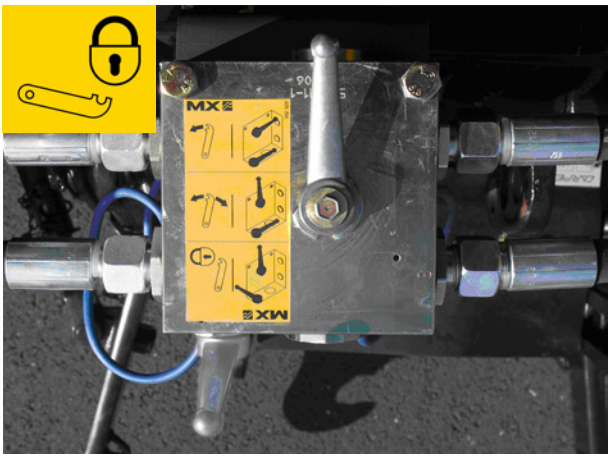
15.2.1 "Locking" operation

Usage: this mode is used when the MX front linkage is not being used or for travelling long distances with an implement or a weight (safety in transit).

Plus, it enables the couplings at the rear of the tractor to be freed up for another powered implement.

Description: the MX front linkage hydraulic system is locked out. The linkage arms can no longer be raised or lowered.

Do the following: turn the levers as shown in the photo opposite.

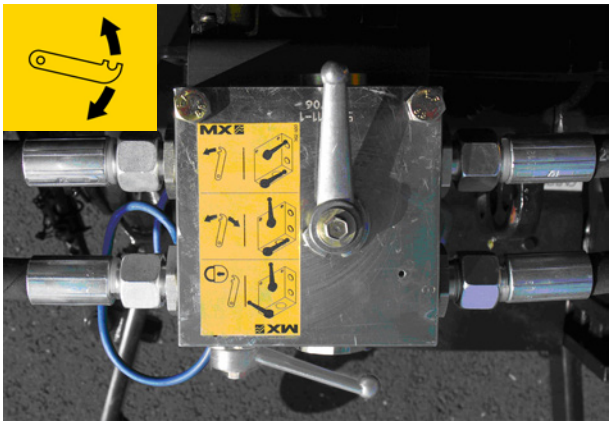


15.2.2 "Double-acting" operation

Usage: this mode is used mainly when hitching up an implement (lowering linkage arms) and for working the soil with a bulldozer blade for instance.

Description: the rams on the MX front linkage are pressurised on both lifting and lowering.

Do the following: turn the levers as shown in the photo opposite.

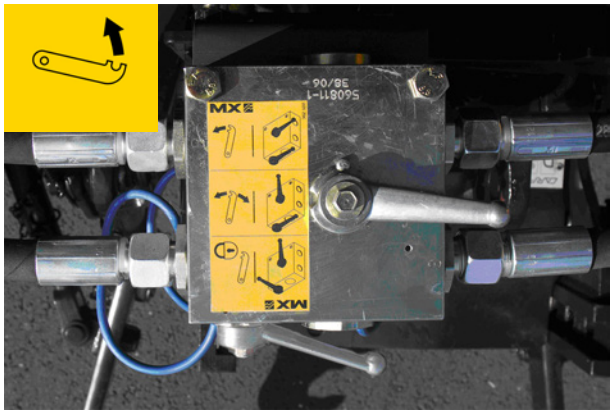


15.2.3 "Single-acting" operation.

Usage: this mode is used mainly with a front-end mowers or with an implement fitted with depth wheels.

Description: the rams on the MX front linkage are pressurise on lifting, but lowering takes place through gravity (unpressurised) due to the weight of the implement. This absence of pressure on lowering ensures the implement rests unconstrained on the ground. This protects the implement.

Do the following: turn the levers as shown in the photo opposite.



16. External control

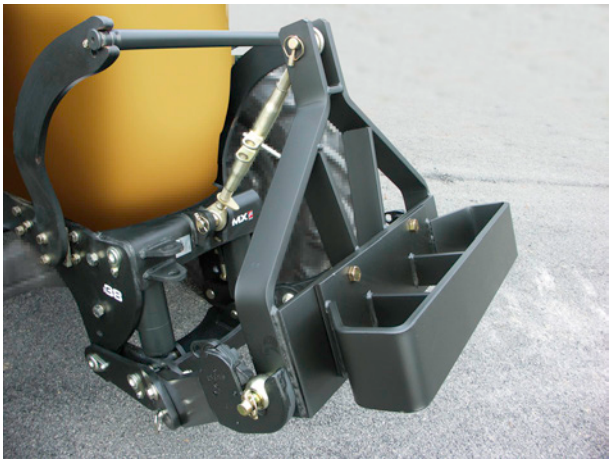
This unit fitted with 2 buttons is located on the front linkage and controls raising and lowering of the arms when hitching an implement.

A second external control can be fitted on the front linkage to operate another hydraulic function (e.g.: hydraulic top link).

NOTE : External control according to equipment.

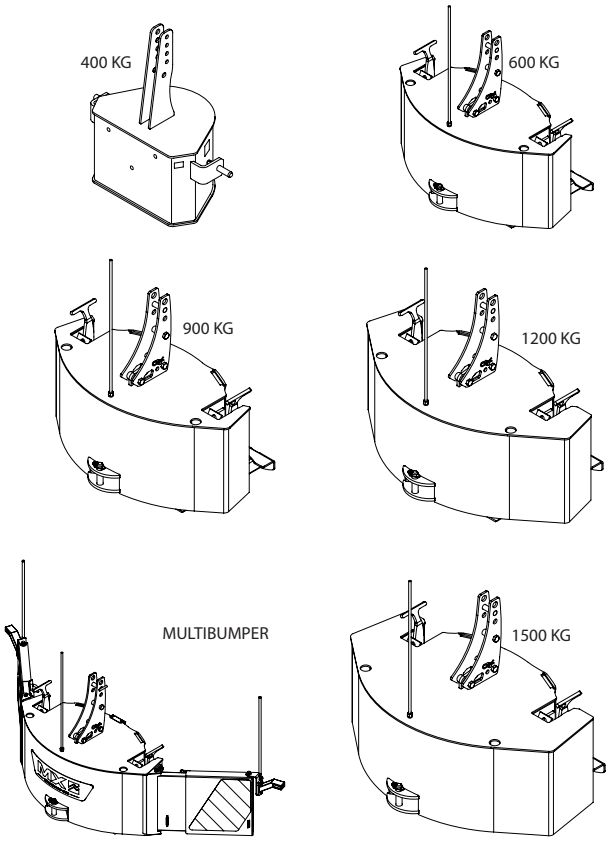
17. Accessories

A number of attachments for MX front linkages are shown below:



— Weight-carrier triangle: this attachment enables the tractor's original weights and weightcarriers to be picked up.

— Counterweights: various capacities ranging from 400 to 1,500 kg are on offer for optimum stability of the tractor-implement combination. These weights can be hitched either on the front linkage or on the rear linkage.



18. Controls

Using the factory-fitted control valve on the tractor. Refer to the user manual for the tractor.

18.2.1 With the MX control valve

— Raising and lowering the MX front linkage, move the MX monolever forwards or backwards.

18.2.2 Controlling the auxiliary hydraulic line (according to equipment).

— Move the MX monolever to the right and left.

NOTE: In order to operate a second auxiliary hydraulic line, press and hold the green button on the monolever handle and move it to the left or to the right.

19. Maintenance

Drain the tractor's hydraulic circuit regularly and change the filters in accordance with the manufacturer's recommendation.
Contaminated oil ceases to lubricate, causing wear to all the hydraulic components (pumps, control valves, rams). Even clear oil may be spent.

Check the bolts for tightness after 10 and 50 hours of use, then every 100 hours, maintaining the recommended tightening torque.

Check before and after each use for any hydraulic leaks, and verify that the pins and locking pins are all present.

The linkage frame is fitted with wear bushes. If there is excessive play (approx. 2 mm), replace them with new genuine MX bushes.

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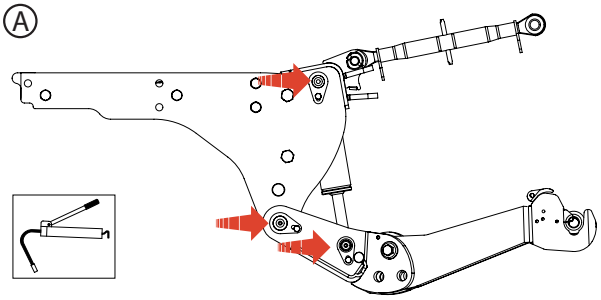

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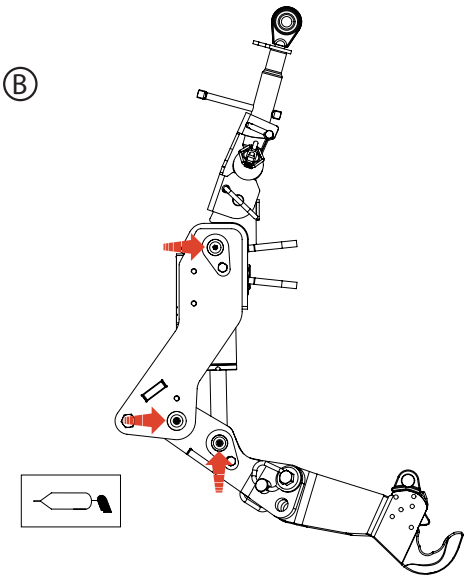


A: MX R10 - R16
B: MX R06 - R09

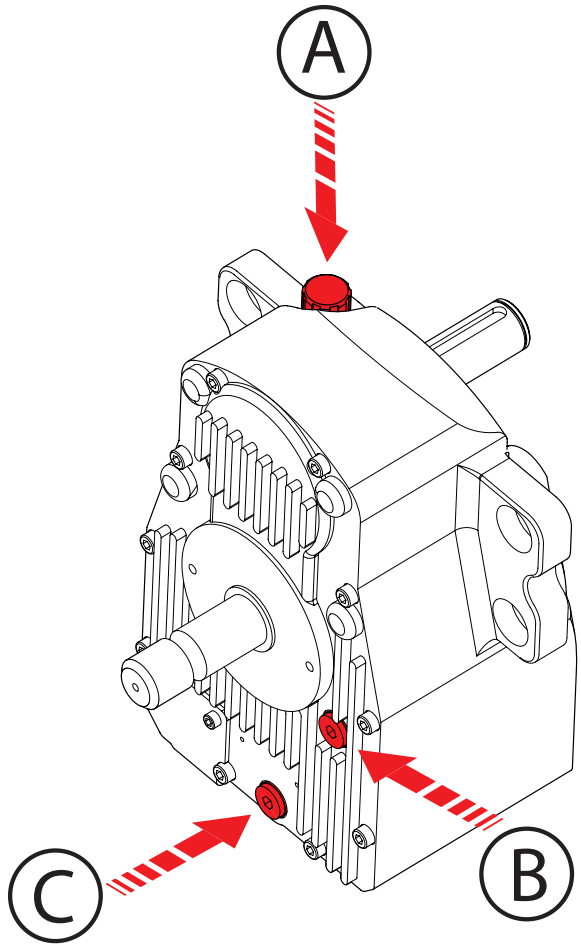
19.2.1 Front power take-off

After 50 and then after every 100 hours work (at least once per year):

— Drain the oil and replace the filter with a new genuine MX one (see filter removal procedure below).

— Next, refill the housing with oil up to the level shown opposite. Recommended oil type: STOU (Supper Tractor Oil Universal) 10W30 ou 10W40.

NOTE: The oil level of the power take-off unit must regularly be checked and topped up if required.



A: Bouchon de remplissage
B: Niveau d'huile
C: Bouchon de vidange

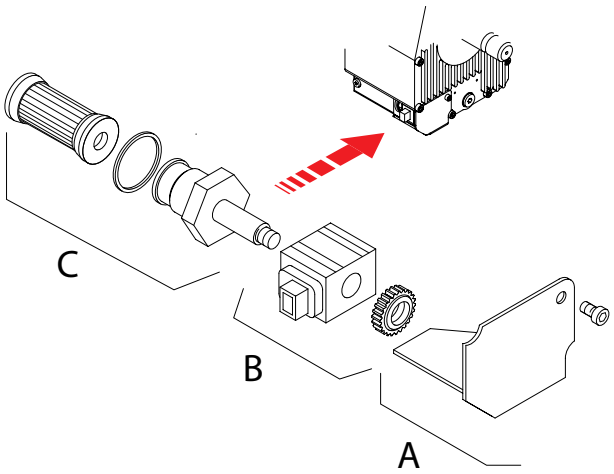
19.2.2 Filter removal and refitting procedure

Removing the filter:

— Remove the casing using the CHc screw (A).

— Remove the coil by unscrewing the milled washer (B).

— Unscrew the core and change the filter (C).



Refitting the filter:

— After changing the filter, screw in the core (C).

— Refit the coil by screwing in the milled washer (B).

— Reset the casing using the CHc screw (A).

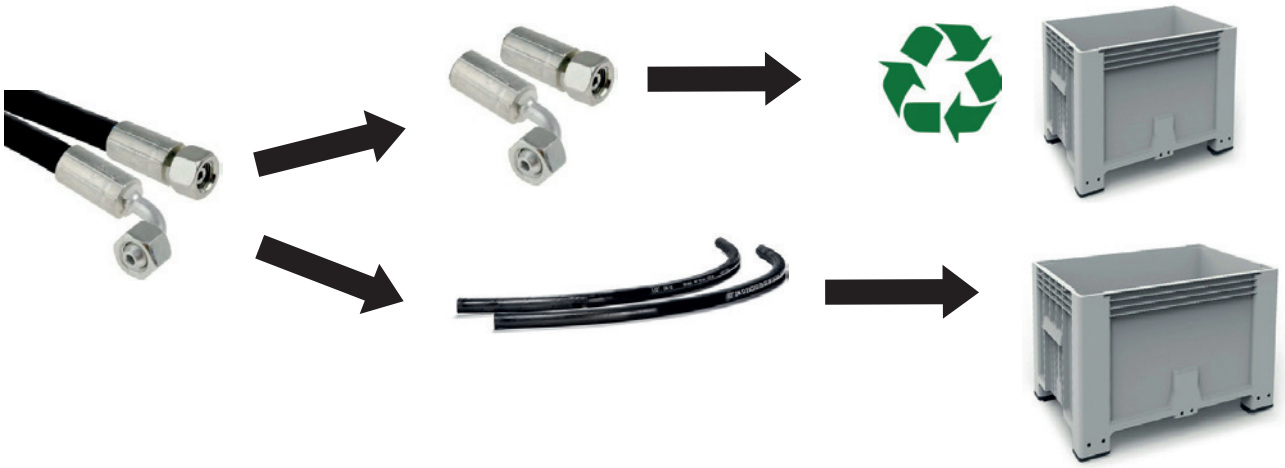
20. Recycling MX products

Hydraulic system

— At the end of their service life, MX products must be drained of hydraulic oil by an authorised service technician.
— The hydraulic hoses must be removed before the equipment can be recycled.
— All MX product owners are obliged to comply with these environmentally-friendly precautions if they decide to dismantle their end-of-life products themselves.

Disposal of hazardous waste (oils and hoses)

— Hydraulic oils must be stored in the containers or drums provided for this purpose and be sent to approved disposal facilities.
— For hydraulic hoses, the steel connectors can be separated from the rubber hoses.
— The steel end caps will be recycled as scrap by approved facilities.
— The rubber hoses will be placed in watertight containers and sent for processing by approved facilities.



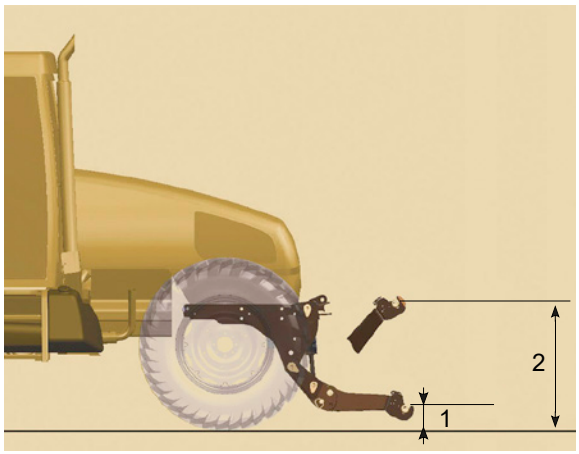
High-tech MX product components and electrical and electronic equipment:

— Waste electrical and electronic equipment (WEEE) present in MX products will be removed and then disposed of via approved channels for recovery.

Recycling of decontaminated MX products

— Decontaminated MX products will be sent to approved iron and metal recycling channels.

21. Technical specifications



	R06	R09	R10	R16
Front linkage category	1	1	2	2
Lifting power at front linkage arm end*	**600 Kg**	**900 Kg**	**1,000 Kg**	**1,600 Kg**
Lifting power at implement center of gravity 610 mm from ball ends*	**400 Kg**	**580 Kg**	**770 Kg**	**1,050 Kg**
Width between lifting arms	**683 mm**	**683 mm**	**825 mm**	**825 mm**
Lift arm height from ground*				
in lowest position (1)	**< 200 mm**	**< 200 mm**	**< 200 mm**	**< 200 mm**
in highest position (2)	**> 600 mm**	**> 600 mm**	**> 850 mm**	**> 850 mm**
Couplers	**Auto. Cat. 1 and 2**	**Auto. Cat. 1 and 2**	**Auto. Cat. 2 and 3N**	**Auto. Cat. 2 and 3N**
Balls end	**Cat.2**	**Cat.2**	**Cat. 2**	**Cat. 2**
Top link / length	**Cat. 1 / 345 to 500 mm**	**Cat. 1 / 345 to 500 mm**	**Cat.2 / 460 to 680 mm**	**Cat.2 / 460 to 680 mm**
Front Power Take Off (PTO)**				
Maximum PTO power	**100 hp**	**100 hp**	**150 hp**	**150 hp**
Front PTO shaft speed	**1,000 rpm**	**1,000 rpm**	**1,000 rpm**	**1,000 rpm**
PTO shaft profile (DIN 9611)	**1" 3/8 - 6 splines**	**1" 3/8 - 6 splines**	**1" 3/8 - 6 splines**	**1" 3/8 - 6 splines**

NOTE : * Average data. They are variable depending on the tractor characteristics. ** Option available depending on tractor - front hitch compatibility.

DECLARATION OF CONFORMITY

The manufacturer:
M-extend France SAS
Registered office: 19, Rue de Rennes, 35690 Acigné (France).
Registered with the RCS of Rennes under number 639 200 260.

Hereby declares that the material :

Front loader *T408evo or T408+evo or T410evo or T410+evo or T412evo or T412+evo or T414evo or T417evo or T418evo or TX420evo or TX425evo or TX430evo*
or
Front loader *U503 or U504 or U505 or U506 or U506+ or U507 or U508 or U508+ or U509 or U510 or U510+ or U511 or U512 or U512+ or U514 or U514+*
or
Front loader *A104 or A106 or A110 or F303 or F304*
or
Front loader *C1 or C1s or C2u or C2 or C2+ or C3u or C3 or C3+ or C4 or C4+*
or
Loader implement *BMS or BRDS or BQU or BF + GF or CGU or TR or TRu or BMSC or CGC or TRC or BT or BR or BC or BF or BMSU or BRU or BFU or CL or BRC or BFC or LC or CG or BP or SG or BB or PCS or LS or PG*
or
Implement for telescopic handler loader *BMSA or CGA or BTA or TR or BCA or BCDA*
or
Feeding bucket *BD or GDT*
or
Manubal *L40 or L400 or L400HD or L500 or L6000 or C30 or C40 or U40 or V40 or V60 or V500 or W500 or V400HD or V5000HD or V7000HD*
or
Front linkage *R04 or R05 or R06 or R08 or R09 or R10 or R12 or R16 or R20 or R28 or R38 or R53*
or
Weight *M250 or M400 or MM600 or MM900 or MM1200 or MM1500 or MM400AD or MBX or MXS 250 or MXS 400 or MXS 600 or BOX 100L or BOX 150L or MBX XS*
or
Multibumper

serial number: [ ] **,**

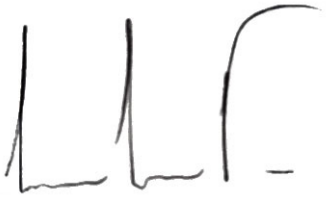
please write in the box above the serial number given on the equipment's nameplate.

included in the list of serial numbers 000001001 to 999999365,

is in conformity with the Machinery Directive 2006/42/EC
and with the Supply of Machinery (Safety) Regulations 2008.

M-extend France SAS, 19 rue de Rennes at Acigné (35690), is authorised to prepare the technical file.

Acigné, 2 September 2025.



B.Gauchenot
CEO

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